

Application Engineering INFO 5100

Assignment 3

Problem 1 Due Friday Oct 2, at 11:59PM

The objective of this assignment is to practice how to initialize a group of complex objects according to the “manage suppliers” model we discussed in class. You are to write a simple java class with a main method. The method will create a supplier directory of 5 suppliers (Dell, HP, Toshiba, Apple, and Lenovo). For each supplier you are to create a product catalog of 10 products of distinct offerings. To verify that you initialized and linked the objects correctly, you must print a report listing each supplier along with a list of their products. This report can take the form of simple print statements [System.println()] on the output window of your Netbean project.

Problem 2 Due Sunday Oct 4, at 11:59PM

Persons, Patients, and vital signs, Graphics

The object for this assignment is to integrate charting tools into your java application. You are responsible for showing how you do user navigation and the ability to move from a person focused JPanel to its associated patient focused one. The ability to move back to where you came from is also important. This is a creative project so you will be judged on the professional look of your app.

The use cases that you are expected to support in this assignment are the following:

- A. Manage person profiles
 - a. Create a person profile
 - b. Using search or table selection, select a person and view person record in detail. The person record will include summary of patient information. Such as the patient id and a list of vital signs.
 - c. Browse Person list
 - d. View and update Person profile

- B. Manage Patient Profile

- 1) Create a patient profile and link to an existing person. (must create person first).
- 2) Define vital signs for the patient and maintain them as a history of vital signs. The vital signs will include all the ones we defined before in the table showing the measures and their normal ranges.
- 3) One should be able to update a vital sign if it was wrong.

C. Reporting

- a. The user selects a patient through a search.
- b. For the selected patient do the following:
 - i. Display all the vital signs in table format allowing the user to see trends in the person's health. For example, the history of BP over must be shown in a graph nicely displayed. One report you could do is all vital signs charts in single jpanel.
- c. Allow the user to go back to do a search for another patient and display their vital signs graphically as well.
- d. For extra credit show how you show abnormality of vital signs so the user can understand them quickly. For example, if the last vital sign is abnormal may be use should give an alert. Ideas are welcome and will be rewarded.

Submission Instructions:

Create a folder called as "Assignment_3". Inside it have 2 folder – "Problem_1" and "Problem_2". The rest of instructions remains the same.